

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1                   1.       (Currently amended) A method comprising:  
2                   serially receiving, from a source, a plurality of forward messages each addressed  
3                   to ~~one of a corresponding destination among a plurality of destinations, wherein each forward~~  
4                   ~~message is received at a destination directly from the source;~~  
5                   receiving a plurality of availability signals, each availability signal indicating that  
6                   one of the destinations is available to accept ~~a~~ its corresponding forward message;  
7                   for first forward messages whose corresponding first destinations are available,  
8                   simultaneously sending ~~a~~ the first forward messages ~~to each available~~ their corresponding first  
9                   destinations;  
10                  subsequent to receiving the first forward messages, simultaneously receiving,  
11                  after a predetermined period of time, a plurality of reverse messages from the first destinations,  
12                  each reverse message corresponding to one of the first forward messages ~~simultaneously sent to~~  
13                  ~~an available destination;~~ and  
14                  serially sending the reverse messages to the source.

1                   2.       (Original) The method of claim 1, wherein the source identifies each of  
2                   the forward messages by a different tag, further comprising:  
3                   placing a tag in a delay buffer when sending to a destination the forward message  
4                   identified by that tag, wherein the delay buffer implements a delay equal to the predetermined  
5                   period of time such that the tag is available when receiving from memory the reverse message  
6                   corresponding to the forward message; and  
7                   sending the tag to the source with the reverse message, whereby the source  
8                   associates the reverse message with the forward message.

1           3.       (Original) The method of claim 1, further comprising:  
2                associating a priority with each forward message; and  
3                sending a forward message to a destination when that forward message has a  
4       higher priority than other forward messages addressed to that destination.

1           4.       (Original) The method of claim 3, wherein the priority of each forward  
2       message represents an age of that forward message.

1           5.       (Previously presented) The method of claim 1, further comprising:  
2                associated a priority with each reverse message; and  
3                sending a reverse message to the source when that reverse message has a higher  
4       priority than other reverse messages.

1           6.       (Original) The method of claim 5, wherein the priority of each reverse  
2       message represents an age of that reverse message.

1           7.       (Original) The method of claim 1, wherein each destination is a memory  
2       bank, each forward message is a memory transaction, and each reverse message is the result of  
3       one of the memory transaction.

1           8.       (Currently amended) An apparatus comprising:  
2                means for serially receiving, from a source, a plurality of forward messages each  
3       addressed to ~~one of a~~ corresponding destination among a plurality of destinations, ~~wherein each~~  
4       ~~forward message is received at a destination directly from the source;~~  
5                means for receiving a plurality of availability signals, each availability signal  
6       indicating that one of the destinations is available to accept ~~a~~ its corresponding forward message;  
7                means for simultaneously sending ~~a first~~ forward messages ~~to each available~~ their  
8       corresponding first destinations, wherein the first destinations are determined to be available  
9       based on the availability signals;

10 means for simultaneously receiving, after a predetermined period of time, a  
11 plurality of reverse messages from the first destinations, each reverse message corresponding to  
12 one of the first forward messages ~~simultaneously sent to an available destination~~; and  
13 means for serially sending the reverse messages to the source.

1 9. (Original) The apparatus of claim 8, wherein the source identifies each of  
2 the forward messages by a different tag, further comprising:

3 means for placing a tag in a delay buffer when sending to a destination the  
4 forward message identified by that tag, where the delay buffer implements a delay equal to the  
5 predetermined period of time such that the tag is available when receiving from memory the  
6 reverse message corresponding to the forward message; and

7 means for sending the tag to the source with the reverse message, whereby the  
8 source associates the reverse message with the forward message.

1 10. (Original) The apparatus of claim 8, further comprising:

2 means for associating a priority with each forward message; and

3 means for sending a forward message to a destination when that forward message  
4 has a higher priority than other forward messages addressed to that destination.

1 11. (Original) The apparatus of claim 10, wherein the priority of each forward  
2 message represents an age of that forward message.

1 12. (Previously presented) The apparatus of claim 8, further comprising:

2 means for associated a priority with each reverse message; and

3 means for sending a reverse message to the source when that reverse message has  
4 a higher priority than other reverse messages.

1 13. (Original) The apparatus of claim 12, wherein the priority of each reverse  
2 message represents an age of that reverse message.

1                   14.     (Original) The apparatus of claim 8, wherein each destination is a  
2 memory bank, each forward message is a memory transaction, and each reverse message is the  
3 result of one of the memory transactions.

1                   15.     (Currently amended) A computer program product, tangibly stored on a  
2 computer-readable medium, comprising instructions operable to cause a programmable processor  
3 to:

4                   serially receive, from a source, a plurality of forward messages each addressed to  
5 ~~one of a corresponding destination among a plurality of destinations, wherein each forward~~  
6 ~~message is received at a destination directly from the source;~~

7                   receive a plurality of availability signals, each availability signal indicating that  
8 one of the destinations is available to accept a its corresponding forward message;

9                   for first forward messages whose corresponding first destinations are available,  
10 simultaneously send ~~a the first~~ forward messages to each available their corresponding first  
11 destinations;

12                   simultaneously receive, after a predetermined period of time, a plurality of reverse  
13 messages from the first destinations, each reverse message corresponding to one of the forward  
14 messages ~~simultaneously sent to an available destination;~~ and

15                   serially send the reverse messages to the source.

1                   16.     (Original) The computer program product of claim 15, wherein the source  
2 identifies each of the forward messages by a different tag, further comprising instructions  
3 operable to cause a programmable processor to:

4                   place a tag in a delay buffer when sending to a destination the forward message  
5 identified by that tag, wherein the delay buffer implements a delay equal to the predetermined  
6 period of time such that the tag is available when receiving from memory the reverse message  
7 corresponding to the forward message; and

8                   send the tag to the source with the reverse message, whereby the source associates  
9 the reverse message with the forward message.

1                   17.    (Original) The computer program product of claim 15, further comprising  
2 instructions operable to cause a programmable processor to:  
3                   associate a priority with each forward message; and  
4                   send a forward message to a destination when that forward message has a higher  
5 priority than other forward messages addressed to that destination.

1                   18.    (Original) The computer program product of claim 17, wherein the  
2 priority of each forward message represents an age of that forward message.

1                   19.    (Previously presented) The computer program product of claim 15,  
2 further comprising instructions operable to cause a programmable processor to:  
3                   associate a priority with each reverse message; and  
4                   send a reverse message to the source when that reverse message has a higher  
5 priority than other reverse messages.

1                   20.    (Original) The computer program product of claim 19, wherein the  
2 priority of each reverse message represents an age of that reverse message.

1                   21.    (Original) The computer program product of claim 15, wherein each  
2 destination is a memory bank, each forward message is a memory transaction, and each reverse  
3 message is the result of one of the memory transactions.